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10/24/97

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION REPORT

I. HEADING

Date: 10/24/97
Subject: Moschiano Plating Company, Chicago, Cook County, Illinois
From: Brad Stimple, U.S. EPA OSC, ERB, Response Section 3

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POLREP Number: POLREP 1 (Initial)

II. BACKGROUND

Site No.: B515
Delivery Order: 5001-05-678
Response Authority: CERCLA (ERB)
CERCLIS No.: ILD062471081

Start Date: 8/13/97
Completion Date: Ongoing
Demobilization Date: NA
NPL Status: Non-NPL

III. SITE INFORMATION

A. Incident Category

CERCLA incident category: Abandoned Electroplating Facility.

B. Site Description

1. Site Location

The Moschiano Plating Company (MPC) site is located at 2808 West Lake Street (latitude 53'04" N, longitude 41'20" W) in a low income/high minority area of mixed industrial and residential development. The property is bordered on the north by residential areas, on the south by Lake Street, on the west by Mozart Street, and on the east by a residential building owned by the Holy Temple Church. Local businesses are located along the south side of Lake Street. There is a Chicago Transit Authority train platform located directly above Lake Street that runs parallel to the building. Several schools are located within 1/4-mile of the site.

The Moschiano Plating Company (MPC) was incorporated in 1972 and moved to the Lake Street location in 1979. Three distinct plating lines existed on site. Electroplating operations included nickel, copper, brass, and chromium plating. The owner of the facility died in April 1997, and site operations have been inactive since then.

According to Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) documents, the company has a long history of discharge violations. Since 1989, MPC has been cited for over 50 violations by the MWRDGC. These violations include illegal discharges, Spill Prevention Control and Countermeasure Plan violations and effluent limits violations. Between November 1995 and December 1996, samples collected by the MWRDGC indicated elevated concentrations of zinc, copper, nickel, and/or total metals on sixteen separate occasions. MPC was also fined by the Illinois Environmental Protection Agency (IEPA) for violations of air

regulations.

On August 1, 1997, the MPC site was referred to U.S. EPA by the City of Chicago Department of Environment after a portion of the roof had collapsed breaking water lines connected to the fire suppression system. The city agency was concerned that flooding in the building could lead to off-site migration of hazardous substances. U.S. EPA and its START contractor, E&E, Inc., along with representatives of the city met at the MPC site to determine appropriate measures to secure the site.

2. Description of Threat

The property history indicates that there is a high potential for contamination on the site. Waste in drums, vats, floor drains and on the floor of the building are considered hazardous. Abandoned plating solutions such as copper cyanide, brass cyanide, chromic acid, and acid and caustic baths exist in approximately 75 intact tanks of varying capacities. The tanks are in a deteriorating condition with the potential for failure. If tank failure were to occur, incompatible chemicals could mix and react. Deadly hydrogen cyanide gas could be generated if acid and cyanide solutions were to come in contact with one another. Chromic acid, considered a highly toxic carcinogenic chemical, is present on-site as solution in several tanks and drums. Approximately 75 55-gallon drums and 100 5-gallon containers exist on-site containing various documented flammable, corrosive, and oxidizer chemicals. The building shows signs of vandalism and trespassing which would allow for direct contact to these highly corrosive and toxic chemicals. The building is showing serious signs of deterioration as a portion of the roof has collapsed. Asbestos pipe insulation has also been discovered on-site.

It appears that MPC did not practice proper wastewater treatment methods on-site as no equipment related to those operations are present on-site. It is evident that untreated wastewater was most likely allowed to be discharged directly to the sanitary sewer during operations. Also, it doesn't appear that hazardous wastes generated as part of the plating operation were ever stored and/or disposed properly.

Due to the composition and hazardous characteristics of remaining plating wastes abandoned on-site, a substantial threat to public health, welfare, and the environment exists at the MPC site including: actual or potential exposure to nearby populations by hazardous substances, pollutants or contaminants; hazardous substances in drums, pails, tanks, or other bulk storage containers that may pose a threat of release; weather conditions that may cause hazardous substances to migrate or be released; and a threat of fire and/or explosion.

C. Preliminary Assessment/Site Inspection Results

On August 8, 1997, the U.S. EPA performed a site assessment at the MPC site. Results of chemical analysis of tank and drum samples revealed total concentrations of cyanide at 227,550 ppm from a solid fraction and liquid at 47,000 ppm. Total chromium was detected at 82,200. It is assumed that these wastes are considered hazardous due to characteristics of reactivity and toxicity respectively. Flashpoint values from several drum samples were recorded at less than 140° F. and are considered hazardous waste due to characteristics of ignitability. Values recorded from pH analysis from tank samples were less than 2 and are considered hazardous due to characteristics of corrosivity.

According to these results, hazardous substances remaining on-site can be considered RCRA hazardous wastes according to 40 CFR 261 and are designated as U.S. EPA waste codes D001, D002, D003, and D007. Listed hazardous wastes exist on-site as spent cyanide bath solutions designated as F007 and cyanide plating bath residual wastes designated as F008.

IV. RESPONSE INFORMATION

A. Situation

1. Current Situation

On August 12, 1997, verbal authorization to expend up to $50,000 was granted to perform immediate emergency response activities. On August 13, 1997, the ERCS was activated to the site. The ERCS and their subcontractor secured the site by adding metal window guarding and razor wire in appropriate places. The roof was temporarily repaired and covered. Collapsed roof structures inside were properly braced. All utilities were

disconnected at this time. The ERCS completed the activities on August 15, 1997.

As part of the site securing activities, the ERCS contracted with a security guard company to provide 24/hour security. Security guards remained on-site until the time-critical removal started on October 13, 1997, and will continue through the end of the project.

Removal activities will focus on identifying all wastes considered hazardous on-site in tanks, drums, small containers and scattered about the site as debris. Wastes will be characterized, consolidated, and transported off-site for disposal. Site soils will also be evaluated for potential contamination. Upon removing all wastes, the building interior and possibly the sewer system will be decontaminated.

2. Removal Activities to Date (10/13/97 to 10/24/97)

Removal activities this reporting period included: 1. Implementing the site health and safety plan, 2. mobilization of site equipment, office trailers and materials and performing general site set-up activities, 3. Completed identification and segregation of approximately 80 plating related tanks and vessels and approximately 75 55-gallon drums, 4. Began hazard characterization of samples collected from tanks and drums, 5. Began removing hazardous and non-hazardous debris from the site, 6. Two roll-off boxes of hazardous debris was removed for proper off-site disposal and four loads of non-hazardous debris was removed for disposal, 7. Began researching disposal options and receiving price quotations from disposal facilities.

3. Enforcement

A General Notice of Liability and a CERCLA 104(e) information request was forwarded to the owner of MPC site (Frank Moschiano's wife). The owner declined the opportunity to perform cleanup activities due to lack of appropriate finances.

B. Planned Removal Activities

* Continue sampling, HAZCAT, and waste identification.
* Develop waste streams and temporarily stage accordingly.
* Perform outside chemical analysis of composite waste streams as necessary.
* Consolidate waste streams as appropriate.
* Overpack drums as necessary.
* Arrange transportation and disposal of wastes.
* Evaluate potential soil contamination.

D. Key Issues

All appropriate state and local agency personnel have been notified of the removal action taking place. Will speak to the City of Chicago about demolishing of the building upon concluding site removal activities.

V. COST INFORMATION (totals as of 10/23/97)

	CEILING	COSTS	REMAINING
ERCS	$550,000	$106,276	$443,724
START	$ 12,500	$ 4,175	$ 8,325
U.S. EPA	$ 50,000	$ 8,835	$ 41,165

VI. DISPOSITION OF WASTES

Wastestream	Medium	Quantity	Containment	Treatment	Disposal
Hazardous Debris	Solid	36 cy	Roll-Off Box Bulked	Off-Site Microencapsulation	The EQ Company Belleville, MI